

CLAIMS

[1] A work piece wrapping apparatus for wrapping a work piece being transported along a transporting path in a wrapping sheet, comprising:

5 a wrapping sheet supply device that supplies the wrapping sheet onto the transporting path;

 a delivery guide device that causes the wrapping sheet to be wrapped by pushing the wrapping sheet on the transporting path so as to cause the work piece to pass through a transit aperture that is provided between a pair of delivery guides; and

10 a spreading guide provided in the transit aperture of the delivery guide device, and which gradually spreads the wrapping sheet out from a center area in the transverse direction of the wrapping sheet towards both edges thereof with the work piece advances through the transit aperture.

15 [2] The wrapping apparatus according to claim 1, wherein

 smoothing pads that cause the wrapping sheet to contact tightly to a surface of the work piece are provided in the transit aperture of the delivery guide device, and

 the smoothing pads are formed by a plurality of bristles and a space between a pair of the smoothing pads that face each other across the transit aperture is set so as to
20 be less than the thickness of the work piece.

[3] The wrapping apparatus according to claims 1 or 2, wherein

 a correction guide that elastically sandwiches the work piece is provided upstream side from the delivery guide device in the transporting direction of the work
25 piece.

[4] The wrapping apparatus according to one of claims 1 through 3, wherein

a plurality of suction belts that feed it forward between the transporting path and the delivery guide device while suctioning the wrapping sheet are provided in the wrapping sheet supply device, and

the spacing between the plurality of suction belts gradually separates on the work piece transporting path side such that tension is placed on the wrapping sheet.

[5] The wrapping apparatus according to claim 4, wherein

at least three suction belts are provided, and

in the suction belt located in the center, a non-suction area is provided in the vicinity of the transporting path of the work piece.

[6] The wrapping apparatus according to claim 4, wherein

an air guide that discharges de-electrification air in the transporting direction of the wrapping sheet onto the wrapping sheet being transported by the suction belts is provided.